Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week KR 2003021208 A 20030312 KR 20038628 Α 20030211 200346 B

Priority Applications (No Type Date): KR 20038628 A 20030211

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

KR 2003021208 A 1 G06F-003/023

Abstract (Basic): KR 2003021208 A

NOVELTY - An electronic abacus is provided to easily confirm and verify a process or a result of a calculation according to the movement bead and to realize an abacus contest between users of an abacus through the Internet.

DETAILED DESCRIPTION - A magnetic device(20) generating a magnetic field from the movement of each bead (3) is installed to front/read side of the bead (3). A plurality of sensors detects the movement of a bead (3) and a position of a cipher shaft(2) holding the bead (3) from the magnetic field. A transmitting device(50) analyzes the calculation information from a digital signal and transmits the calculation information after converting a signal detected by the sensors into the digital signal. A USB(Universal Serial Bus) port(60) transmits the analysis information according to the position of the cipher shaft and the movement of the bead (3) to a computer. The transmitting device(50) comprises an analog/digital converter(51), a data analyzer(52), and a USB controller(53). pp; 1 DwgNo 1/10

Derwent Class: T01; T04

International Patent Class (Main): G06F-003/023

10/7/26 (Item 6 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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015428545 **Image available**

WPI Acc No: 2003-490687/200346

Device for verifying calculation result through movement recognition of

Patent Assignee: CHOI Y W (CHOI-I); EDUSERVE CO LTD (EDUS-N); KWON Y B (KWON-I)

Inventor: LEE H C

Number of Countries: 001 Number of Patents: 001

Patent Family:

Kind Date Applicat No Kind Date Week KR 2003021207 A 20030312 KR 20038627 Α 20030211 200346 B

Priority Applications (No Type Date): KR 20038627 A 20030211

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

KR 2003021207 A 1 G06F-003/023

Abstract (Basic): KR 2003021207 A

NOVELTY - A device for verifying a calculation result through the movement recognition of an abacus is provided to easily confirm and verify a process or a result of a calculation by recognizing the movement of the abacus , converting the movement into a digital signal and transmitting it to a computer.

DETAILED DESCRIPTION - A board(20) includes a connection port by

installing to a bottom of an abacus frame(1). A plurality of sensors detects a position of a cipher shaft(2) and the movement of beads placed in the cipher shaft(2). A transmitting device(40) connected to the board(20) converts the signal detected by the sensors into the digital signal, analyzes the calculation information from the digital information and transmits the calculation information. The computer (50) displays the calculation information on a monitor screen by receiving the analyzed information from the transmitting device(40). The transmitting device(40) comprises an analog/digital converter(41), a data analyzer(42), and a USB(Universal Serial Bus) controller(43).

pp; 1 DwgNo 1/10 Derwent Class: T01; T04

International Patent Class (Main): G06F-003/023

10/7/27 (Item 7 from file: 350) DIALOG(R) File 350: Derwent WPIX (c) 2006 The Thomson Corp. All rts. reserv.

015268113 **Image available** WPI Acc No: 2003-329042/200331

Abacus instruction apparatus for use as score board, has magnetic indicators which are manually moved over entire surface of board to indicate selected cell within indicating regions of board

Patent Assignee: LIANG G C (LIAN-I); GAN C L (GANC-I)

Inventor: LIANG G C; GAN C L

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No Kind Date Applicat No Kind Date US 20020197590 A1 20021226 US 2002127652 A 20020422 200331 B SG 100673 Al 20031226 SG 20012231 Α 20010423 200414

Priority Applications (No Type Date): SG 20012231 A 20010423 Patent Details: Patent No Kind Lan Pg Main IPC Filing Notes

US 20020197590 A1 28 G06C-001/00 SG 100673

A1 G09B-001/14

Abstract (Basic): US 20020197590 A1

NOVELTY - A rectangular board (100) has five different indicating regions (110-114) which are divided into cells. Each cell is marked with different decimal number. The magnetic indicators (120-122) mounted on the board, are moved over the entire surface of the board to indicate selected cell.

USE - For use as score board, display board, counter and calculator board.

ADVANTAGE - Allows both easy detection of the represented numbers as well as simple mechanical construction.

DESCRIPTION OF DRAWING(S) - The figure shows the front view of abacus instruction apparatus.

rectangular board (100) indicating regions (110-114) magnetic indicators (120-122)

pp; 28 DwgNo 1a/12

Derwent Class: P85

and constant to the action

International Patent Class (Main): G06C-001/00; G09B-001/14 International Patent Class (Additional): G09B-019/02

10/7/28 (Item 8 from file: 350)